

# JSON - OVERVIEW

JSON or JavaScript Object Notation is a lightweight is a text-based open standard designed for human-readable data interchange. Conventions used by JSON are known to programmers which include C, C++, Java, Python, Perl etc.

- JSON stands for JavaScript Object Notation.
- This format was specified by Douglas Crockford.
- This was designed for human-readable data interchange
- JSON has been extended from the JavaScript scripting language.
- JSON filename extension is **.json**
- JSON Internet Media type is **application/json**
- The Uniform Type Identifier is public.json

## Uses of JSON

- JSON is used when writing JavaScript based application which includes browser extension and websites.
- JSON format is used for serializing & transmitting structured data over network connection.
- JSON is primarily used to transmit data between server and web application.
- Web Services and API.s use JSON format to provide public data.
- JSON can be used with modern programming languages.

## Characterstics of JSON

- It is easy to read and write JSON.
- JSON is lightweight text based interchange format
- JSON is language independent.

## Simple Example in JSON

Example shows Books information stored using JSON considering language of books and there editions:

```
{
  "book": [
    {
      "id": "01",
      "language": "Java",
      "edition": "third",
      "author": "Herbert Schildt"
    },
    {
      "id": "07",
      "language": "C++",
      "edition": "second",
      "author": "E.Balagurusamy"
    }
  ]
}
```

After understanding the above program we will try another example, let's save the below code as **json.htm**:

```
<html>
<head>
<title>JSON example</title>
<script language="javascript" >

    var object1 = { "language" : "Java", "author" : "herbert schildt" };
    document.write("<h1>JSON with JavaScript example</h1>");
    document.write("<br>");
    document.write("<h3>Language = " + object1.language+"</h3>");
    document.write("<h3>Author = " + object1.author+"</h3>");

    var object2 = { "language" : "C++", "author" : "E-Balagurusamy" };
    document.write("<br>");
    document.write("<h3>Language = " + object2.language+"</h3>");
    document.write("<h3>Author = " + object2.author+"</h3>");

    document.write("<hr />");
    document.write(object2.language + " programming language can be studied " +
    "from book written by " + object2.author);
    document.write("<hr />");

</script>
</head>
<body>
</body>
</html>
```

Now let's try to open [json.htm](#) using IE or any other javascript enabled browser, this produces the following result:

# JSON with JavaScript example

**Language = Java**

**Author = herbert schildt**

**Language = C++**

**Author = E-Balagurusamy**

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C++ programming language can be studied from book written by E-Balagurusamy

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You can refer to [JSON Objects](#) chapter about more information on JSON objects.